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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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09/475,499

12/30/1999

THOMAS D. MERRITT

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05/02/2007

EXAMINER

LEUNG, JENNIFER A

ART UNIT

PAPER NUMBER

1764

MAIL DATE

DELIVERY MODE

05/02/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**SUPPLEMENTAL
Notice of Allowability**

Application No.

09/475,499

Examiner

Jennifer A. Leung

Applicant(s)

MERRITT, THOMAS D.

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendments submitted on 11/28/2006 and 01/05/2007.
2. ☒ The allowed claim(s) is/are 9-11.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

SUPPLEMENTAL EXAMINER'S AMENDMENT

A supplemental examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Thomas D. Merritt on April 23, 2007. The application has been amended as follows:

IN THE CLAIMS:

Claim 1-8 (Cancelled).

Claim 9 (Currently Amended). A flue gas conversion apparatus comprising, in combination:

- (a) a carbon dioxide laser for the purpose of creating a laser beam;
- (b) a plurality of catalytic conversion means ~~for producing a converted flue gas~~, each of said means including at least one fluid inlet ~~for receiving a flue gas~~ and at least one fluid outlet ~~for discharging the converted flue gas~~, wherein at least one of said catalytic conversion means includes at least one fluid inlet for receiving a flue gas and at least one fluid outlet for discharging a converted flue gas;
- (c) a means to split said laser beam into a plurality of beams, whereby at least one element of said split beam is directed to each of said plurality of catalytic conversion means, thereby causing a substantial temperature increase of said catalytic conversion means; and
- (d) a chemical combining means disposed in fluid communication with said fluid outlets of said plurality of catalytic conversion means, wherein the converted flue gas produced in each

said at least one catalytic conversion means is chemically combined, in said chemical combining means, with the converted fluids of the other remaining catalytic conversion means in said chemical combining means, to thereby produce a fuel product.

Claim 10 (Previously Presented). The flue gas conversion apparatus in claim 9, wherein said carbon dioxide laser is a flowing gas carbon dioxide laser, and wherein said laser includes a fluid inlet and a fluid outlet, whereby gaseous carbon dioxide is permitted to enter said laser, flow through said laser, and exit said laser.

Claim 11 (Previously Presented). The flue gas conversion apparatus in claim 10, further comprising fluid interconnection means for permitting said fluid outlet of said laser to interconnect with at least one of said fluid inlets of said catalytic conversion means, whereby said flowing gas of said laser is first utilized as a medium for creating said laser beam, and said medium is subsequently utilized as a reactant in said catalytic conversion means.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Leung whose telephone number is (571) 272-1449. The examiner can normally be reached on 9:30 am - 5:30 pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn A. Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jennifer A. Leung *JAL*
April 23, 2007


Glenn Caldarola
Supervisory Patent Examiner
Technology Center 1700